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NEBRASKA ASSOCIATION OF HOSPITALS AND HEALTH SYSTEMS

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December 20, 1996

Mr. John Nakahata
Federal Communications Commission
Office of the Chairman
1919 M Street, N.W., Room 814
Washington, D.C. 20554

Re: CC Docket 96-45 Common Carrier Bureau Seeks Comment on Universal Service Recommended Decision

Dear Mr. John Nakahata:

The enclosed document was in the Office of the Secretary, Federal Communications Commission, by the December 19 deadline. Time constraints relative to submission of the document precluded inclusion of the following refinement and clarification relative to the dollar amount required from the Universal Service Fund.

The following is based on two assumptions:

1) That implementation of the telemedicine network will grow over a three year period. Therefore, it will not require full funding the first year.

2) Dependence on the Universal Service Fund for toll-free Internet access will decline as toll-free access becomes more available to rural communities.

Universal Service Fund requirements over time:

Year One	Internet	$ 38,880	Year Two	Internet	$ 38,880
	T-1 Installation	$ 61,050		T-1 Installation	$ 61,050
	T-1 Line charge	$420,710		T-1 Line charge	$ 841,420
	Total	$520,640		Total	$ 941,350
Year Three	Internet	$ 30,240	Subsequent	Internet	$ 30,240
	T-1 Installation	$ 61,050	Years	T-1 Line charge	$1,262,130
	T-1 Line charge	$1,262,130		Total	$1,292,370
	Total	$1,353,420			

Thank you for this opportunity to submit comments on behalf of Nebraska hospitals and rural health care providers.

Sincerely,

Ted Schultz
Vice President for Administrative Services

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Enclosure

Comments Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45

Re: Common Carrier Bureau Seeks Comment on Universal Service Recommended Decision

The following comments are opinions and recommendations of the Nebraska Association of Hospitals and Health Systems (NAHHS), an affiliate of the American Hospital Association. The NAHHS represents 96 percent of the hospitals in Nebraska. The object of NAHHS is best summed up by the following excerpt from the mission statement, "The Nebraska Association of Hospitals and Health Systems will support and encourage its members in the development of various health care delivery systems that are accountable to their communities and oriented toward community health improvement . . . "

The recent emphasis on "health care reform," has placed increasing fiscal burdens on health care providers. These burdens are hardest felt by the small rural providers. These rural pressures are further compounded by the fiscal constraints felt by larger metropolitan providers who have reached out to provide consultation and some direct care to the rural areas. As the purse strings are tightened even further, telemedicine will become an essential link in providing health care to rural citizens on a timely and cost-effective basis. The ability to research the growing body of medical information and the ability to receive timely and cost effective continuing medical education is also of great importance. These factors, coupled with the increasing need for timely and accurate data flow for medical records, billing and statistical information, all focus attention on the essential nature of quality, low cost telecommunication capability.

The following comments relate to section 4 of "Public Notice Seeking Comment on Universal Service Recommended Decision," (DA 96 1891) Released November 18, 1996:

Scope of Services Necessary for The Provision of Health Care

Rural health care providers need two telecommunications paths to provide effective health care. Toll-free access to the Internet is necessary to provide cost-effective use of the numerous sources of medical information and to facilitate the flow of health care related information. For this purpose, 56 KB lines are currently sufficient. Secondly, the ability to provide real-time video linkage between the patient and their local physician on one end and the specialist on the other end is essential. In addition to the video linkup, a relatively small amount of additional bandwidth for simultaneous data transmission is sometimes required. It is also occasionally necessary to send multiple, high resolution X-ray type studies. The time required to send these studies may be critical to an injured person. For all of these purposes, a T-1 circuit (1.544 MB) is the most appropriate and cost effective.

Given the opposing forces operating on telemedicine, 1.544 MB seems to be a reasonable bandwidth. On the one hand, improved compression technology has the effect of reducing required bandwidth, while on the other hand, the development of new technologies in medicine increases the need for bandwidth.

Supporting bandwidth greater than 1.544 Mbps would appear to offer relatively small additional return in improved health care to the rural residents.

Provision of Toll-Free Internet Access

Perhaps the lowest cost way to assure toll-free Internet access to the 18 hospitals which do not have it, is to simply subsidize the local phone companies at an average toll rate of $.20 per minute for an average of 15 hours access, per hospital, per month. That would amount to $3240 per month, or $38,880 per year. This subsidy to the phone company should continue only so long as toll-free access is not available to the community.

Elimination of Distance-Based Charges

While there is disparity in rates, it is not primarily the difference in rates that unfavorably impacts the rural health care providers' ability to utilize T-1 circuits. It is the mileage charge which makes the cost of telemedicine unmanageable for rural providers. In Nebraska, the distance from a rural health care provider to a hospital of sufficient size to include specialists for consulting is usually very great.

The reduction of distance-based charges to providers of rural health care may best be effected by charging the providers the price of the circuit within the nearest "metropolitan" area. That charge could be defined as the monthly charge to connect to the central office within the metropolitan area that provider within the metropolitan area who is most distant from the central office. For example, the current charge for a T-1 to connect the most distant "metro" hospital to its central office switch is $644.64 per month. That amount would then become the charge for each T-1 circuit connecting each eligible rural provider to the telemedicine network.

Given the nature of providing health care to a rural population, it is essential that the rural rate be effective regardless of which end initiates a specific consultation. For example, it may make more sense for the specialist to initiate the connection for a prescheduled consultation, rather than have the patient and their physician stare at a blank screen while they wait for the consulting surgeon who is running 10 minutes late in surgery.

Cost of Eliminating Distance-Based Charges

It is reasonable to assume a three year period over which all hospitals and rural health clinics will be connected via T-1 circuits to their primary source of consultations. These connections should be structured in such a way as to allow at least one way video from a single location to all

of the connected sites simultaneously. This ability will allow cost effective and timely medical education.

If we assume the cost to the universal service fund for the elimination of distance-based charges is the difference between the current tariffs and what it costs to hook up the most costly metropolitan provider to the metropolitan central office, ($644.64), then the annual cost to the universal service fund is $1,262,130.10. These figures are based on established or likely medical consultation patterns, and assume a three-year phase in of all eligible hospitals and rural health clinics. We might reasonably assume sense not all health care providers will come on the network at onec, 1/3 the total amountwould be used the first year. Two thirds of the total amount would be used the second year, and the total amount would be used the third year and thereafter. The one time installation cost for the necessary T-1 circuits is $183,150.94. This amount would also be spread over a three year period.

Definition of Rural and Metropolitan Areas

For the definition of metropolitan we looked first to the definition of "standard metropolitan statistical area." There are two SMSAs in Nebraska: Lancaster County which contains the city of Lincoln, Population 191,972, and Sarpy, Douglas and Washington Counties, which contain Omaha, and its contiguous communities of Bellevue, Papillion, Lavista and Ralston, combined population 393,225. The Omaha SMSA also includes Washington County. However, since Washington County is generally of a rural nature and has no communities contiguous to Omaha, we advise it not be included. All remaining counties in Nebraska are rural.

Costs Associated With Supporting Upgrades to the Public Switched Network

It is our understanding that because all of the lines for the telemedicine T-1 network would be leased lines, there would be no cost implications for the "public switched network."

It is likely the upgrades to the public switched network would be insignificant as they would relate toll-free Internet access. The increase would amount to 18 hospitals utilizing 56K lines for 15 hours per month.

Respectfully submitted by:

Ted Schultz

Ted Schultz, Vice President for Administrative Services
Nebraska Association of Hospitals and Health Systems